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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,409	07/11/2003	Richard D. Dettinger	ROC920030129US1	5540

7590 07/28/2005

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EXAMINER	
DANG, THANH HA T	

ART UNIT	PAPER NUMBER
2163	

DATE MAILED: 07/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/618,409	DETTINGER ET AL.	
	Examiner	Art Unit	
	Thanh-Ha Dang	2163	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 April 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-33* is/are pending in the application.

4a) Of the above claim(s) *6 and 11-20* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,7-10 and 21-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-5, 7-10, 21-33.

   Applicant cancelled Claim 6.

   Claims 11-20 are non-elected.

2. This Action is made FINAL.

Response to Amendment

3. Receipt of Applicant's Amendment, filed April 27, 2005 is acknowledged

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory

double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 8, and 29 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/418,592. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the reasons provided below.

Claims Comparison Table

Application #10/618409		Application #10/418,592
Claims:	1	1, 13, 25, 34, 52, 61
	8	1, 13, 25, 34, 52, 61
	29	1, 13, 25, 34, 52, 61

Certain limitations including, "wherein each logical field is defined by a logical field name, at least one location attribute identifying a location of physical data corresponding to the logical field and a reference to an access method selected from at least two different access method types"; "wherein each of the different access methods types defines a different manner of exposing the

physical data corresponding to the logical fields"; and "providing, for a requesting entity, a query specification defining an interface to the plurality of logical fields, thereby allowing abstract queries to be composed on the basis of the plurality of logical fields" in claims 1, 13, 25, 34, 52, and 61 (from the application #10/418,592) are found in claims 1, 8 and 29 of this application. Official Notice is given that it is well settled that the removal of limitations from a claimed invention, where the reminder of the structure is unaffected, would have been obvious.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined

under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 4-5, and 8-9 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,694,306 issued to Nishizawa et al. ("Nishizawa").

As to Claim 1, Nishizawa teaches "a computer implemented method for providing a logical representation of physical fields of an underlying physical database to facilitate querying the physical fields, the method comprising:

- providing a logical model to logically describe the physical fields of the underlying physical database, the logical model comprising logical fields corresponding to respective physical fields, wherein each logical field is defined by a logical field name, at least one location attribute identifying a location of physical data corresponding to the logical field and a reference to an access method selected from at least two different access method types; wherein each of the different access methods types defines a different manner of exposing the physical data corresponding to the logical field" (column 1, lines 38-48 and column 3, lines 48-61);
- "providing, for a requesting entity, a query specification defining an interface to the plurality of logical fields, thereby allowing abstract queries to be composed on the basis of the plurality of logical fields" (column 5, lines 35-61); and

- "providing a runtime component configured to transform an abstract query into an executable query containing at least one combinatorial statement, the abstract query comprising a condition and at least two result fields selected from the logical fields of the logical model, each result field having executable counterparts in the combinatorial statement of the executable query" (column 8, lines 31-40).

As to Claim 4, Nishizawa teaches "wherein the executable query is an SQL statement" (Figure 8, wherein block808 displays the executable query which is an SQL statement).

As to Claim 5, Nishizawa teaches "wherein the executable query is an XQuery statement" (Figure 8, wherein block808 displays the executable query which is equivalent to an XQuery statement).

As to Claim 8, Nishizawa teaches "a computer implemented method for providing a logical representation of physical fields of an underlying physical database to facilitate querying the physical fields, the method comprising:

- providing a logical model to logically describe the physical fields of the underlying physical database, the logical model comprising logical field: corresponding to respective physical fields, wherein each logical field is defined by a logical field name, at least one location attribute identifying a location of physical data corresponding to the logical field and a reference to an access method selected from at least two different access method types; wherein each of the different access methods types defines a

different manner of exposing the physical data corresponding to the logical field" (column 1, lines 38-48 and column 3, lines 48-61);

- "providing, for a requesting entity, a query specification defining an interface to the plurality of logical fields thereby allowing abstract queries to be composed on the basis of the plurality of logical fields" (column 5, lines 35-61);
- "receiving, from the requesting entity, an abstract query defined with respect to a logical model comprising logical fields corresponding to respective physical fields, the abstract query comprising a condition and at least two result fields selected from the logical fields of the logical model" (column 7, lines 50-65); and
- "transforming the abstract query into an executable query containing at least one combinatorial statement, the abstract query comprising a condition and at least two result fields selected from the logical fields of the logical model, each result field having executable counterparts in the combinatorial statement of the executable query" (column 8, lines 31-40).

As to Claim 9, Nishizawa teaches "wherein the physical data entities comprise a plurality of tables in a database" (Figures 2 and 7, wherein block117 and block118 illustrate the physical data entities comprising a plurality of tables in a database, column 5, lines 38-40).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2-3, 7, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,694,306 issued to Nishizawa et al. ("Nishizawa") as applied to claims 1 and 8 above, and further in view of U.S. Patent No. 5,963,938 issued to Wilson et al. ("Wilson").

Claims 2-3 and 7:

Nishizawa teaches "a computer implemented method for providing a logical representation of physical fields of an underlying physical database to facilitate querying the physical fields, the method comprising: providing a logical model to logically describe the physical fields of the underlying physical database, the logical model comprising logical fields corresponding to respective physical fields, wherein each logical field is defined by a logical field name, at least one location attribute identifying a location of physical data corresponding to the logical field and a reference to an access method selected from at least two different access method types; wherein each of the different access methods types defines a different manner of exposing the physical data corresponding to the logical field; providing, for a requesting entity, a query specification defining an interface to the plurality of logical fields, thereby allowing abstract queries to

be composed on the basis of the plurality of logical fields; and providing a runtime component configured to transform an abstract query into an executable query containing at least one combinatorial statement, the abstract query comprising a condition and at least two result fields selected from the logical fields of the logical model, each result field having executable counterparts in the combinatorial statement of the executable query".

As to Claim 2, Nishizawa does not explicitly teach "wherein the combinatorial statement is a UNION statement and wherein the at least two result fields are related by UNION information which causes the runtime component to produce the UNION statement". However,

Wilson teaches "wherein the combinatorial statement is a UNION statement and wherein the at least two result fields are related by UNION information which causes the runtime component to produce the UNION statement" (Figure 12, wherein block230 and block240 illustrate the union of at least two result fields which causes the runtime component to produce the union statement, column 16, lines 31-65 and column 17, lines 1-18).

As to Claim 3, Nishizawa does not explicitly teach "wherein the abstract query is user-defined". However,

Wilson teaches "wherein the abstract query is user-defined" (column 17, lines 19-39).

As to Claim 7, Nishizawa does not explicitly teach "providing a graphical user interface wherein the at least two result fields are specified in a graphical user interface". However,

Wilson teaches "a graphical user interface wherein the at least two result fields are specified in a graphical user interface" (Figure 12, column 16, lines 31-67 and column 17, lines 1-26).

It would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because Wilson teaches "the combinatorial statement is a union statement ..."; "the abstract query is user-defined"; and "a graphical user interface wherein the at least two result fields are specified in a graphical user interface" would have allowed Nishizawa's system to provide a graphical method of presenting to a user certain options, such as selecting a field name from a plurality of field names within the database, a desired value associated with a field name, and a logical operator forming a relation between the field name and the desired value as suggest by Wilson (column 3, lines 26-31). Further, "the combinatorial statement is a union statement ..."; "the abstract query is user-defined"; and "a graphical user interface wherein the at least two result fields are specified in a graphical user interface" as taught by Wilson provides an apparatus for graphically presenting to a user a plurality of options for selecting a field name in a database, a logical operator relating the field name to a desired value, the relation created thereby being used to filter, search, or otherwise sift

information in the database to find records therein having values corresponding to the desired value (column 2, lines 58-64).

As to Claim 10, Nishizawa teaches "a computer implemented method for providing a logical representation of physical fields of an underlying physical database to facilitate querying the physical fields, the method comprising: providing a logical model to logically describe the physical fields of the underlying physical database, the logical model comprising logical field: corresponding to respective physical fields, wherein each logical field is defined by a logical field name, at least one location attribute identifying a location of physical data corresponding to the logical field and a reference to an access method selected from at least two different access method types; wherein each of the different access methods types defines a different manner of exposing the physical data corresponding to the logical field; providing, for a requesting entity, a query specification defining an interface to the plurality of logical fields thereby allowing abstract queries to be composed on the basis of the plurality of logical fields; receiving, from the requesting entity, an abstract query defined with respect to a logical model comprising logical fields corresponding to respective physical fields, the abstract query comprising a condition and at least two result fields selected from the logical fields of the logical model; and transforming the abstract query into an executable query containing at least one combinatorial statement, the abstract query comprising a condition and at least two result fields selected

from the logical fields of the logical model, each result field having executable counterparts in the combinatorial statement of the executable query".

Nishizawa does not explicitly teach "providing a graphical user interface wherein the at least two result fields are specified in a graphical user interface". However,

Wilson teaches "a graphical user interface wherein the at least two result fields are specified in a graphical user interface" (Figure 12, column 16, lines 31-67 and column 17, lines 1-26).

It would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because Wilson teaches "a graphical user interface wherein the at least two result fields are specified in a graphical user interface" would have allowed Nishizawa's system to provide a graphical method of presenting to a user certain options, such as selecting a field name from a plurality of field names within the database, a desired value associated with a field name, and a logical operator forming a relation between the field name and the desired value as suggest by Wilson (column 3, lines 26-31). Further, "a graphical user interface wherein the at least two result fields are specified in a graphical user interface" as taught by Wilson provides an apparatus for graphically presenting to a user a plurality of options for selecting a field name in a database, a logical operator relating the field name to a desired value, the relation created thereby being used

to filter, search, or otherwise sift information in the database to find records therein having values corresponding to the desired value (column 2, lines 58-64).

Claims 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,694,306 issued to Nishizawa et al. ("Nishizawa") and further in view of U.S. Patent No. 5,963,938 issued to Wilson et al. ("Wilson").

As to Claim 29, Nishizawa teaches "a computer system, comprising memory and at least one processor, and further comprising:

- a logical model comprising a plurality of logical field definitions mapping to physical fields of physical entities of data, whereby the logical model provides a logical view of the data, each of the definitions comprising a logical field name, at least one location attribute identifying a location of physical data corresponding to the logical field name and a reference to an access method selected from at least two different access method types; wherein each of the different access methods types defines a different manner of exposing the physical data corresponding to the logical field name of the respective logical field definition" (Figures 2, 4-7, column 3, lines 48-61, column 5, lines 33-67);
- "a query specification defining an interface to the plurality of logical field definitions thereby allowing abstract queries to be composed on the basis of the plurality of logical field definitions" (column 7, lines 4-41); and

- Nishizawa does not explicitly teach "a graphical user interface allowing user selection and arrangement of logical result fields selected from the logical model; wherein the graphical user interface comprises input cells for user-selected logical result fields and wherein a predefined geometric relationship between cells specifies whether user-selected logical result fields in the cells are related by a first combinatorial statement type or a second combinatorial statement type". However,

  Wilson teaches "a graphical user interface allowing user selection and arrangement of logical result fields selected from the logical model; wherein the graphical user interface comprises input cells for user-selected logical result fields and wherein a predefined geometric relationship between cells specifies whether user-selected logical result fields in the cells are related by a first combinatorial statement type or a second combinatorial statement type" (Figures 5-12, column 3, lines 25-31, column 14, lines 42-60).

It would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because Wilson teaches "a graphical user interface allowing user selection and arrangement of logical result fields selected from the logical model; wherein the graphical user interface comprises input cells for user-selected logical result fields and wherein a predefined geometric relationship between cells specifies whether user-selected logical result fields in the cells are related

by a first combinatorial statement type or a second combinatorial statement type" would have allowed Nishizawa's system to provide a graphical method of presenting to a user certain options, such as selecting a field name from a plurality of field names within the database, a desired value associated with a field name, and a logical operator forming a relation between the field name and the desired value as suggest by Wilson (column 3, lines 26-31). Further, "a graphical user interface allowing user selection and arrangement of logical result fields selected from the logical model; wherein the graphical user interface comprises input cells for user-selected logical result fields and wherein a predefined geometric relationship between cells specifies whether user-selected logical result fields in the cells are related by a first combinatorial statement type or a second combinatorial statement type" as taught by Wilson provides an apparatus for graphically presenting to a user a plurality of options for selecting a field name in a database, a logical operator relating the field name to a desired value, the relation created thereby being used to filter, search, or otherwise sift information in the database to find records therein having values corresponding to the desired value (column 2, lines 58-64).

Claims 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,694,306 issued to Nishizawa et al. ("Nishizawa") and further in view of U.S. Patent No. 5,963,938 issued to Wilson et al. ("Wilson") as

applied to claim 29 above, and further in view of U.S. Patent No. 6,640,221 issued to Levine et al. ("Levine").

Claims 30-33:

Nishizawa and Wilson teach "a computer system, comprising memory and at least one processor, and further comprising: a logical model comprising a plurality of logical field definitions mapping to physical fields of physical entities of data, whereby the logical model provides a logical view of the data, each of the definitions comprising a logical field name, at least one location attribute identifying a location of physical data corresponding to the logical field name and a reference to an access method selected from at least two different access method types; wherein each of the different access methods types defines a different manner of exposing the physical data corresponding to the logical field name of the respective logical field definition; a query specification defining an interface to the plurality of logical field definitions thereby allowing abstract queries to be composed on the basis of the plurality of logical field definitions; and a graphical user interface allowing user selection and arrangement of logical result fields selected from the logical model; wherein the graphical user interface comprises input cells for user-selected logical result fields and wherein a predefined geometric relationship between cells specifies whether user-selected logical result fields in the cells are related by a first combinatorial statement type or a second combinatorial statement type".

As to Claim 30, Nishizawa does not explicitly teach "the first combinatorial statement type is a UNION and the second combinatorial statement type is a JOIN". However,

Levine teaches "the first combinatorial statement type is a UNION and the second combinatorial statement type is a JOIN" (column 7, lines 12-50).

As to Claim 31, Nishizawa does not explicitly teach "the predefined geometric relationship is vertical". However,

Levine teaches "the predefined geometric relationship is vertical" (column 3, lines 25-28 and column 8, lines 27-33 and lines 46-56).

As to Claim 32, Nishizawa does not explicitly teach "user-selected logical result fields in horizontally adjacent cells are JOINed". However,

Levine teaches "user-selected logical result fields in horizontally adjacent cells are JOINed" (Figure 1, wherein the relations 34A and 34B from the Employee and Customer tables illustrate fields in horizontally adjacent cells are joined, column 7, lines 12-21).

As to Claim 33, Nishizawa does not explicitly teach "a relational database containing the physical entities of data". However,

Levine teaches "a relational database containing the physical entities of data" (Figure 1, column 4, lines 2-4).

It would have been obvious to one of ordinary skill in the database processing art at the time of the present invention to combine the teachings of the cited references because Levine teaches "the first combinatorial statement

type is a UNION and the second combinatorial statement type is a JOIN"; "the predefined geometric relationship is vertical"; "user-selected logical result fields in horizontally adjacent cells are JOINed"; and "a relational database containing the physical entities of data" would have allowed Nishizawa's system to provide a database system depicting the sequence in which a plurality of tables are joined in the query and a logical operator forming a relation between the field name and the desired value as suggest by Levine (column 3, lines 41-50). Further, "the first combinatorial statement type is a UNION and the second combinatorial statement type is a JOIN"; "the predefined geometric relationship is vertical"; "user-selected logical result fields in horizontally adjacent cells are JOINed"; and "a relational database containing the physical entities of data" as taught by Levine provides a method of configuring joins in a database management system comprising the steps of selecting a plurality of tables from a relational database, setting a plurality of relationships between the plurality of tables, selecting an intermediate result set comprising two or more of the selected tables and selecting a join type for the intermediate result set independently from the plurality of relationships (column 4, lines 1-10).

Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,694,306 issued to Nishizawa et al. ("Nishizawa") and further in view of U.S. Patent No. 5,963,938 issued to Wilson et al. ("Wilson").

As to Claim 21, Nishizawa teaches "a method for building queries comprising:

- providing a logical model to logically describe the physical fields, the logical model comprising logical fields corresponding to respective physical fields" (column 3, lines 48-61);
- Nishizawa does not explicitly teach "providing a graphical user interface allowing user selection and arrangement of logical result fields selected from the logical model"; however,

  Wilson teaches "providing a graphical user interface allowing user selection and arrangement of logical result fields selected from the logical model" (Figures 5-12, column 3, lines 25-31 and column 14, lines 42-60).
- Nishizawa does not explicitly teach "receiving user input specifying a selection and a location, in the graphical user interface, of a first logical result field"; however,

  Wilson teaches "receiving user input specifying a selection and a location, in the graphical user interface, of a first logical result field" (Figures 10-12, wherein block86 and block230 illustrate the receiving user input via the graphical user interface which displays the first logical result field).
- Nishizawa does not explicitly teach "receiving user input specifying a selection and a location, in the graphical user interface, of a second logical result field, wherein the first and second logical result fields have a relative

geometric relationship and define at least a portion of an abstract query"; however,

Wilson teaches "receiving user input specifying a selection and a location, in the graphical user interface, of a second logical result field, wherein the first and second logical result fields have a relative geometric relationship and define at least a portion of an abstract query" (Figures 10-12 wherein block86 and block230 illustrate the receiving user input via the graphical user interface which displays the second logical result field having a relative geometric relationship and defining at least a portion of an abstract query, column 17, lines 55-60); and

- "transforming the abstract query into an executable query containing at least one combinatorial statement containing representations of the first and second logical result fields, and being generated as a result of the relative geometric relationship" (column 12, lines 17-20).

As to Claim 22, Wilson teaches "wherein the combinatorial statement is a UNION" (Figure 11, wherein block230 illustrates the combinatorial statement that is a union which is block238, column 16, lines 59-67 and column 17, lines 1-6).

As to claim 23, Wilson teaches "displaying each of the logical fields of the logical model as selectable logical result fields in the graphical user interface" (Figures 10-12 display each of the logical fields as selectable logical results fields in the graphical user interface).

It would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because Wilson teaches "a receiving user input specifying a selection and a location, in the graphical user interface, of a second logical result field, wherein the first and second logical result fields have a relative geometric relationship and define at least a portion of an abstract query"; "wherein the combinatorial statement is a UNION"; and "displaying each of the logical fields of the logical model as selectable logical result fields in the graphical user interface" would have allowed Nishizawa's system to provide a graphical method of presenting to a user certain options, such as selecting a field name from a plurality of field names within the database, a desired value associated with a field name, and a logical operator forming a relation between the field name and the desired value as suggest by Wilson (column 3, lines 26-31). Further, "a receiving user input specifying a selection and a location, in the graphical user interface, of a second logical result field, wherein the first and second logical result fields have a relative geometric relationship and define at least a portion of an abstract query"; "wherein the combinatorial statement is a UNION"; and "displaying each of the logical fields of the logical model as selectable logical result fields in the graphical user interface" as taught by Wilson provides an apparatus for graphically presenting to a user a plurality of options for selecting a field name in a database, a logical operator relating the field name to a desired value, the relation created thereby being used to filter, search, or otherwise sift

information in the database to find records therein having values corresponding to the desired value (column 2, lines 58-64).

Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,963,938 issued to Wilson et al. ("Wilson") as applied to claim 26 above, and further in view of U.S. Patent No. 6,640,221 issued to Levine et al. ("Levine").

As to Claim 28, Levine teaches "the relative geometric relationship is vertical" (column 8, lines 46-56).

It would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because Wilson teaches "the relative geometric relationship is vertical" would have allowed Nishizawa's system to provide a graphical method of presenting to a user certain options, such as selecting a field name from a plurality of field names within the database, a desired value associated with a field name, and a logical operator forming a relation between the field name and the desired value as suggest by Wilson (column 3, lines 26-31). Further, "the relative geometric relationship is vertical" as taught by Wilson provides an apparatus for graphically presenting to a user a plurality of options for selecting a field name in a database, searching information in the database to find records therein having values corresponding to the desired value (column 2, lines 58-64).

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 24-27 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,963,938 issued to Wilson et al. ("Wilson").

As to Claim 24, Wilson teaches "a computer readable medium containing a graphical user interface program which, when executed, performs an operation for building abstract queries defined with respect to a logical model comprising a plurality of logical field definitions mapping to physical fields of physical entities of the data, the operation comprising :

- receiving user input specifying a selection and a location, in the graphical user interface, of a first logical result field; wherein the graphical user interface allows user selection of logical result fields from the logical model and supports combinatorial relations between user selected logical result fields" (Figure 2 illustrates the process of receiving user input in the graphical user interface which allows user selection and supports combinatorial relations between user selected logical result, column 9, lines 54-67 and column 10, lines 1-23); and

- "receiving user input specifying a selection and a location, in the graphical user interface, of a second logical result field, wherein the first and second logical result fields define at least a portion of an abstract query, which is transformed into an executable query containing at least one combinatorial statement containing counterparts of the first and second logical result fields" (Figures 10-12 illustrate the receiving user input and the graphical user interface which displays the first and second logical result fields defining at least a portion of an abstract query, and the combinatorial statement containing counterparts of the first and second logical result fields, column 17, lines 55-60).

As to Claim 25, Wilson teaches "wherein the combinatorial statement is a UNION" (Figure 11, wherein block230 illustrates the combinatorial statement that is a union which is block238, column 16, lines 59-67 and column 17, lines 1-6).

As to Claim 26, Wilson teaches "a computer readable medium containing a program which, when executed, performs an operation for building abstract queries defined with respect to a logical model comprising a plurality of logical field definitions mapping to physical fields of physical entities of the data, the operation comprising:

- receiving user input specifying a selection and a location, in a graphical user interface, of a first logical result field; wherein the graphical user interface allows user selection and arrangement of logical result fields selected from the logical model" (Figure 2 illustrates the process of

receiving user input in the graphical user interface which allows user selection and supports combinatorial relations between user selected logical result, column 9, lines 54-67 and column 10, lines 1-23);

- "receiving user input specifying a selection and a location, in the graphical user interface, of a second logical result field, wherein the first and second logical result fields have a relative geometric relationship and define at least a portion of an abstract query" (Figures 10-12 illustrate the receiving user input and the graphical user interface which displays the first and second logical result fields having a relative geometric relationship and defining at least a portion of an abstract query, column 17, lines 55-60); and
- "transforming the abstract query into an executable query containing at least one combinatorial statement containing counterparts of the first and second logical result fields, and being generated as a result of the relative geometric relationship" (column 12, lines 17-20).

As to Claim 27, Wilson teaches "wherein the combinatorial statement is a UNION" (Figure 11, wherein block230 illustrates the combinatorial statement that is a union which is block238, column 16, lines 59-67 and column 17, lines 1-6).

Response to Arguments

7. Applicant's arguments with respect to claims 1-5, 7-10 and 29-33 have been considered but are moot in view of the new ground of rejection.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh-Ha Dang whose telephone number is 571-272-4033. The examiner can normally be reached on Monday-Friday from 9:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 571-272-4023. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thanh-Ha Dang
Examiner
Art Unit 2163

MOHAMMAD ALI
PRIMARY EXAMINER